

IN THE CLAIMS:

1. (currently amended) A liquid medicine infusion apparatus for infusing a liquid medicine to a patient comprising:

(a) a liquid medicine pressurizing/supplying means for exerting pressure on a liquid medicine and causing the liquid medicine to flow through a first passage;

(b) a secondary liquid medicine pressurizing means which is connected in liquid communication with the liquid medicine pressurizing/supplying means by said first passage and which is sized to receive and temporarily store an increment of liquid medicine from the liquid medicine pressurizing/supplying means and which exerts a pressure on the liquid medicine that is lower than the pressure exerted on the liquid medicine by the liquid medicine pressurizing/supplying means for forcing the liquid medicine through a second passage connected to and provided downstream of the secondary pressurizing means;

(c) upstream opening/closing means arranged in the first passage, for opening and closing the liquid communication state between the liquid medicine pressurizing/supplying means and the secondary liquid medicine pressurizing means;

(d) downstream opening/closing means arranged in [[a]] the second passage connected to and provided downstream of for opening

and closing the liquid communication state between the secondary pressurizing means and the patient; and

(e) control means for controlling the opening/closing timing of the upstream opening/closing means and of the downstream opening/closing means.

2. (original) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the liquid medicine pressurizing/supplying means is a rubber elastic body.

3. (original) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the liquid medicine pressurizing/supplying means is a spring.

4. (original) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the liquid medicine pressurizing/supplying means is air pressure.

5. (withdrawn) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the secondary liquid medicine pressurizing means is a rubber elastic body.

6. (original) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the secondary liquid medicine pressurizing means is a spring.

7. (withdrawn) The liquid medicine infusion apparatus according to claim 1, wherein means for pressurizing liquid medicine of the secondary liquid medicine pressurizing means is air pressure.

8. (original) The liquid medicine infusion apparatus according to claim 1, wherein the upstream opening/closing means and the downstream opening/closing means comprise electromagnetic valves.

9. (withdrawn) The liquid medicine infusion apparatus according to claim 1, wherein the upstream opening/closing means and the downstream opening/closing means comprise clamps.

10. (withdrawn) The liquid medicine infusion apparatus according to claim 1, wherein the upstream opening/closing means and the downstream opening/closing means are comprised of an integrated unit using a stopcock.